

PATENT  
W&B Ref. No. : INF 2268-US  
Atty. Dkt. No. INFN/WB0072

### REMARKS

This is intended as a full and complete response to the Final Office Action dated December 27, 2005, having a shortened statutory period for response set to expire on March 27, 2006. Applicants submit this response to place the application in condition for allowance or in better form for appeal. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-28 are pending in the application. Claims 1-28 remain pending following entry of this response.

#### Claim Rejections - 35 U.S.C. § 102

Claims 1-3 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by *Schnabel* (US 6788087). Applicants respectfully traverse this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). In this case, *Schnabel* does not disclose "each and every element as set forth in the claim", as described below.

With respect to claim 1, and the claims that depend therefrom, *Schnabel* does not disclose "a switching device to selectively couple the test terminal to the internal voltage line during testing of the first circuit." The Examiner argues that *Schnabel* discloses a switching device (as a combination of elements 11, 12 and 8) which selectively couples the test terminal (pad 5) to the internal voltage line (voltage line of 2) during testing of the first circuit in Figures 1-2. However, the cited figures and corresponding passages are in fact directed to test terminals (i.e., pads 5) which are constantly connected (i.e., before, during and after testing procedures) via the signal lines 4 to the memory circuit 2. (See *Schnabel* Col. 4, Lines 1-2, 54-55 and Figs. 1 and 2). The elements 11, 12 and 8 of *Schnabel* which the Examiner cites as the "switching

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device" do not "selectively couple the test terminals to the internal voltage line during testing of the first circuit" as claimed because the test terminals (pads 5) are always connected to the memory circuit 2 regardless of whether the circuit is being tested or being operated in normal operation.

Furthermore, *Schnabel* does not disclose any supply level lines related to its disclosed subject matter such as "an internal voltage line" as claimed. The Examiner simply states "voltage line of 2" as "an internal voltage line" as claimed. However, *Schnabel* does not disclose that the memory circuit 2 includes any internal voltage lines (i.e., internal supply level lines) which are connected to the test terminals (pads 5). *Schnabel* clearly states that the "signal lines 4" which are constantly connected to the pads 5, via which to the bus lines 7, are signal level lines (e.g., address lines and data lines) instead of supply level lines. (*Schnabel*, Col. 4, lines 53-58.) Therefore, *Schnabel* does not disclose "a switching device to selectively couple the test terminal to the internal voltage line during testing of the first circuit."

Accordingly, Applicants respectfully submit that the cited sections of *Schnabel* do not teach each and every element as set forth in the claim. Withdrawal of the rejection is respectfully requested.

With respect to claim 23, *Schnabel* does not disclose activating a first switch to couple the test terminal to the internal voltage line after application of the activation signal, whereby the internal voltage line is provided with external power for the testing. As described above, *Schnabel* discloses a constant electrical connection between the pads 5 and the signal lines 4 and no switch is activated to provide this constant connection. Therefore, *Schnabel* does not disclose "activating a first switch to couple the test terminal to the internal voltage line after application of the activation signal, whereby the internal voltage line is provided with external power for the testing." Accordingly, Applicants respectfully submit that the cited sections of *Schnabel* do not teach each and every element as set forth in the claim. Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

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Claim Rejections - 35 U.S.C. § 103

Claims 7-11, 12, 16-19, 23-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Van Brunt* (US 4,357,703) in view of *Tada et al.* (US 4,801,871, hereinafter *Tada*). Applicants respectfully traverse this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the third criteria, as described below.

The Examiner states that *Van Brunt* discloses a test circuit (elements 40, 20, and 22), a test terminal (elements 21), and a switching device (element 23) coupled to an output of the test circuit and configured to selectively couple (using element 40) the test terminal to the internal voltage line (of item 11) in response to a switching signal from the output. However, the cited portions are in fact directed to a test data input 21 which only acts as a data input to a control shift register 40 (See Figure 1) and which is not coupled to an internal voltage line (e.g., of item 11) as asserted by the Examiner. The elements in *Van Brunt* cited by the Examiner are directed to transmission of data signals via signal level lines and inputs (e.g., signal lines 12 and test data pin 21 of *Van Brunt*). Furthermore, *Van Brunt* does not disclose that the "main function circuit 11" includes any internal voltage lines (i.e., internal supply level lines) which are connected to the test terminal (test data input 21 of *Van Brunt*). Therefore, *Van Brunt* does not disclose "a switching device coupled to an output of the test circuit and configured to selectively couple the test terminal to the internal voltage line" as claimed.

Accordingly, the cited references do not teach or suggest all the claim limitations as asserted by the Examiner. Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

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Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Schnabel* as applied to claim 1 above, and further in view of *Horiguchi et al.* (US 5,347,492, hereinafter *Horiguchi*). Applicants respectfully submit that the rejection over *Schnabel* with respect to claim 1 has been overcome as described above. Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Van Brunt* and *Tada* as applied to claims 7 and 16 above, and further in view of *Horiguchi*. Applicants respectfully submit that the rejection of the claims with respect to *Van Brunt* and *Tada* has been overcome as described above. Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Allowable Subject Matter

Claims 5-6, 14-15, 21-22, 26 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants acknowledge the allowable subject matter. However, Applicants submit that the rejection of the base claims has been overcome as described above. Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

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Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact the undersigned attorney to discuss strategies for moving prosecution forward toward allowance.

Respectfully submitted, and  
**S-signed pursuant to 37 CFR 1.4,**

/Gero G. McClellan, Reg. No. 44,227/  
Gero G. McClellan  
Registration No. 44,227  
PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)